

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Item 6

Agenda ID 13662

ENERGY DIVISION

RESOLUTION E-4711 (Rev.1)

February 26, 2015

R E S O L U T I O N

Resolution E-4711. Confirmation of candidates for appointment to the Diablo Canyon Independent Safety Committee (DCISC) for a three-year term beginning July 1, 2015.

PROPOSED OUTCOME:

- The California Public Utilities Commission ratifies the President's selection of Dr. Peter S. Lam for consideration by the Chair of the California Energy Commission (CEC) for reappointment to the DCISC, and Dr. Michael D. Quinn for consideration by the Chair of the CEC for appointment to the DCISC.

SAFETY CONSIDERATIONS:

- The appointed candidate will serve a three-year term on the DCISC, which is responsible for reviewing operations at PG&E's Diablo Canyon Power Plant for the purpose of assessing the safety of operations and suggesting any recommendations for safe operations.

ESTIMATED COST:

- Ratification of the CPUC President's selection of candidates for appointment to the DCISC will not result in any additional costs.

As required by Decision (D.) 07-01-028 dated January 25, 2007.

SUMMARY

This Resolution ratifies the California Public Utilities Commission (CPUC) President's selection of Dr. Peter S. Lam as a candidate for reappointment to the Diablo Canyon Independent Safety Committee (DCISC), and Dr. Michael D. Quinn for appointment to the DCISC for a three-year term commencing on July 1, 2015. The appointing authority is the Chair of the California Energy Commission (CEC).

BACKGROUND**The DCISC independently monitors the operations of Pacific Gas and Electric Company's Diablo Canyon Power Plant.**

The CPUC created the DCISC in Decision (D.)88-12-083 as part of the overall settlement of the ratemaking issues for the Diablo Canyon Power Plant (DCPP), which is owned and operated by Pacific Gas and Electric Company (PG&E). The DCISC is an independent, three-member committee responsible for monitoring the safety of PG&E's operation of DCPP. The DCISC's budget is paid out of PG&E's revenues and charged to PG&E's ratepayers.¹ D.88-12-083 established the qualifications and procedures for appointment of members to the DCISC and defined the scope of the Committee's operations and responsibilities.²

The DCISC consists of three members, one each appointed by the California Governor, the California Attorney General, and the Chair of the CEC, serving staggered three-year terms.

D.07-01-028 approved changes to the DCISC nomination process.

On October 24, 2006, the DCISC submitted Application (A.) 06-10-024 to propose a restated charter. The CPUC adopted the restated charter in D.07-01-028 on January 25, 2007.

¹ D.88-12-083, Appendix C, Paragraph 16

² D.88-12-083, Appendix C, Attachment A

Section 1.B of the restated charter concerns appointments of DCISC members. It states that candidates for DCISC membership shall be selected from those applicants responding to an open request for applications. The incumbent member whose term is about to expire shall be deemed an additional candidate if he or she consents. The CPUC shall provide for public comment on the applicants' qualifications and potential conflicts of interest. The President of the CPUC shall review the applicants' qualifications, experience, and background, including any conflict of interest, together with any public comments, and shall propose as candidates to the appointing authority only persons with knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The Energy Division shall prepare and circulate for public comment, and place on the CPUC's public agenda, a resolution ratifying the President's selection of candidates and an incumbent member.

An open request for applications to fill the July 1, 2015 vacancy on the DCISC was posted on the CPUC's website. Dr. Peter S. Lam, the incumbent member of the DCISC whose term is expiring on June 30, 2015, consented to reappointment for another term. Dr. Michael D. Quinn, a professional nuclear energy consultant also submitted an application.

In accordance with the nomination process approved in D.07-01-028, an announcement was posted on the CPUC's website on October 8, 2014 seeking applications for the July 1, 2015 vacancy on the DCISC.³ The Chair of the CEC will appoint a candidate to fill this vacancy.

The announcement requested that applications be submitted to the Energy Division by November 19, 2014. An application was received from

³ A link to the announcement posted on the CPUC's website was sent to the service list in A.12-12-012, A.10-01-014, and A.10-01-022 to assure that parties interested in issues relating to DCPD were aware of the announcement. A.12-12-012 addressed PG&E's 2012 Nuclear Decommissioning Cost Triennial Proceeding. A.10-01-014 addressed PG&E's request for funding of seismic studies at Diablo Canyon. A.10-01-022 addressed PG&E's request for funding its DCPD relicensing application at the Nuclear Regulatory Commission.

Dr. Michael D. Quinn. In addition, Dr. Peter S. Lam, the incumbent member of the DCISC whose term expires in July 2015 sent a letter to the Energy Division to confirm his willingness to continue to serve as a member of the DCISC.

Dr. Lam is a consultant to governmental organizations and the nuclear industry on nuclear safety matters, and served as an Administrative Judge of the U.S. Nuclear Regulatory Commission (NRC) from 1990 until 2007. Dr. Lam was originally appointed to the DCISC in 2009 by the honorable Karen Douglas, Chair of the CEC for a three year term ending in 2012. In 2012 Dr. Lam was reappointed to his current three year term which is set to expire in July 2015 by the honorable Dr. Robert Weisenmiller, the current Chair of the CEC.

In his application Dr. Quinn describes his experience working in the nuclear power industry, and consulting for clients in the industry and the U.S. and Canadian governments on nuclear operations and safety. Dr. Quinn was one of the four qualified candidates selected by the CPUC for consideration by the California Governor for appointment to the DCISC for the three-year term beginning July 1, 2014 (see CPUC Resolution 4657-E dated June 12, 2014).

Comments were received in support of Dr. Quinn's appointment to the Diablo Canyon Independent Safety Committee.

On December 9, 2014, an announcement was posted on the CPUC's website inviting comments on the candidacies of Dr. Lam and Dr. Quinn.⁴ Summaries of their qualifications were included with the announcement. The announcement requested that comments be submitted to the CPUC's Energy Division by January 9, 2015.

When Dr. Quinn applied to be a candidate for appointment to the DCISC by the California Governor in 2014, the Energy Division received many comments in support of his appointment. Those comments confirmed Dr. Quinn's experience, knowledge, and reputation in the field of nuclear safety. The comments

⁴ A link to the announcement was also sent to the service lists in A.12-12-012, A.10-01-014, and A.10-01-022. See footnote 3 above.

described Dr. Quinn's technical skills in the field of nuclear operations and safety, his experience with the nuclear industry, his communications and leadership skills, and integrity. Those comments included a description of Dr. Quinn's leadership of a radiation protection recovery effort at the Bruce Nuclear Power Plant in Ontario, Canada where an event had exposed plant workers to airborne radiation. According to the comments, Dr. Quinn was an excellent team leader committed to improving radiation safety standards at the Bruce plant, and his knowledge of the dynamics of a nuclear power station's operations was a key factor in the success of the project. Several of those who commented in support of Dr. Quinn's appointment in 2014 contacted the Energy Division again this year to reaffirm their support for Dr. Quinn's appointment to the 2015 vacancy on the DCISC.

The Alliance for Nuclear Responsibility Supports the Reappointment of Dr. Lam

The Alliance for Nuclear Responsibility (A4NR) sent a letter to the Energy Division in support of Dr. Lam's reappointment to the DCISC. In its letter, A4NR notes statements made by Dr. Lam in 2012 at the CEC, and again in 2014 at a meeting of the DCISC regarding risks at nuclear facilities from unforeseen events such as tsunamis. A4NR states that Dr. Lam has remained engaged in a meaningful exercise of asking tough questions and imagining yet-undeveloped scenarios, and that his work as a safety watchdog is a valuable asset to California ratepayers.

The President of the CPUC has nominated Dr. Lam and Dr. Quinn to be considered by the Chair of the California Energy Commission for the vacancy on the Diablo Canyon Independent Safety Committee beginning July 1, 2015.

The CPUC's President, Michael Picker, has reviewed the qualifications, experience, and background of Dr. Lam and Dr. Quinn and has chosen to provide their names to the Chair of the CEC as candidates for the three-year DCISC position beginning July 1, 2015.

The purpose of this Resolution is to evaluate and ratify President Picker's selection in accordance with Section I.B of the restated charter adopted in D.07-01-028.

NOTICE

Notice of this Resolution was made by publication in the CPUC's Daily Calendar. A copy of the Draft Resolution was sent to Dr. Lam and Dr. Quinn, and to those submitting comments on behalf of them. A copy of the Draft Resolution was also sent to the Chair of the CEC's office and to the service lists in PG&E's A.12-12-012, A.10-01-014, and A.10-01-022.

DISCUSSION

Summaries of the qualifications of Dr. Lam and Dr. Quinn are included in Appendix A of this Resolution.

The restated charter adopted in D.07-01-028 requires that candidates for appointment to the DCISC be persons with knowledge, background and experience in the field of nuclear power facilities and nuclear safety issues who demonstrate they have no conflicts of interest.⁵

Dr. Lam is qualified to continue to serve on the Diablo Canyon Independent Safety Committee.

⁵ Conflicts of interest are set forth in Section I.C of the restated charter. They establish limits on income and gifts from PG&E or an affiliated company, and investments in PG&E or an affiliate for DCISC members. They also prohibit members of the Committee from attempting to use their position to influence action of the Committee in which they have a financial interest. DCISC members are required to file a Statement of Economic Interest in the same manner as designated CPUC employees. No person shall serve on the DCISC who has a prior history of supporting or opposing PG&E as a witness or intervenor in nuclear licensing or CPUC proceedings associated with Diablo Canyon.

Dr. Lam is an incumbent member of the DCISC, having been appointed to an initial three-year term from July 2009 through June 2012, and reappointed for a second term from July 2012 through June 2015 by the Chair of the CEC. He served as an Administrative Judge of the NRC from 1990 until 2007 where he adjudicated nuclear safety issues. Prior to his judicial appointment at the NRC, Dr. Lam worked in managerial and technical capacities in the nuclear energy business for 20 years. Dr. Lam has published numerous technical papers and reports and international publications addressing nuclear reactor operations, design, and safety. He earned a PhD in nuclear engineering from Stanford University in 1971.

Dr. Lam has no conflicts of interest that would preclude his continuing to serve on the DCISC.⁶ His qualifications show that he has knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The comments received from A4NR support Dr. Lam's reappointment to the DCISC.

Dr. Quinn is qualified to serve on the Diablo Canyon Independent Safety Committee.

Dr. Quinn has facilitated regulatory compliance, reliability assessments, and performance improvement in the commercial nuclear power industry since 1999, following a 25 career in the U.S. nuclear power industry. His experience includes developing and delivering root cause evaluation training to NRC staff, assessing significant issues during refueling operations at nuclear power plants, and leading root cause assessments at nuclear facilities. Dr. Quinn has also managed a team that developed and implemented corrective actions to address performance resulting in radiation contamination of several hundred workers at the Bruce Nuclear Generating Station in Ontario, Canada. He has led teams in developing, implementing, and evaluating programs to establish a safety culture at nuclear power plants. Dr. Quinn was Manager of Nuclear Planning and Operational Standards for Northeast Nuclear Energy Company, and has held

⁶ By email to Energy Division staff dated December 9, 2014 Dr. Lam confirmed that he has no conflicts of interest as set forth in Section I.C. of the restated charter.

positions as Radio-Chemist, and Manager of Chemistry and Radiochemistry, in addition to other positions at the Connecticut Yankee Haddam Neck Nuclear Station. Dr. Quinn has a Doctorate in Organizational Management Systems and a Masters of Business Administration degree, both from the University of New Haven, and a B.S. degree in Chemistry from Charter Oak College. He previously held a U.S. NRC Senior Reactor Operator License on a Westinghouse pressurized water reactor.

Dr. Quinn has no conflicts of interest that would preclude his serving on the DCISC. His qualifications show that he has knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The comments received from the public support Dr. Quinn's appointment to the DCISC.

President Picker's selection of Dr. Lam and Dr. Quinn as candidates for the July 1, 2015 vacancy on the Diablo Canyon Independent Safety Committee is ratified.

President Picker's selection of Dr. Lam as a candidate for reappointment, and Dr. Quinn as a candidate for appointment to the DCISC for a three-year term beginning July 1, 2015 is ratified. The President's selection shall be provided to the Chair of the CEC.

COMMENTS

Public Utilities Code section 311 (g)(1) generally requires resolutions to be served on all parties and subject to at least 30 days public review and comment prior to a vote of the CPUC. Accordingly, the Draft Resolution was served on parties and issued for public review and comment no later than 30 days prior to a vote of the CPUC.

On February 10, 2015 the Alliance for Nuclear Responsibility (A4NR) sent a letter to the Energy Division in support of Dr. Lam's reappointment to the DCISC. The Draft Resolution was revised to reflect A4NR's support of Dr. Lam.

FINDINGS AND CONCLUSIONS

1. D.88-12-083 created the Diablo Canyon Independent Safety Committee (DCISC).
2. The DCISC is an independent, three-member committee responsible for monitoring the safety of PG&E's operation of the Diablo Canyon Power Plant.
3. D.07-01-028 adopted a restated charter for the DCISC including revised procedures for appointments of DCISC members.
4. On October 8, 2014, in accordance with D.07-01-028, an announcement was posted on the CPUC's website seeking applications for the July 1, 2015 vacancy on the DCISC.
5. The Chair of the California Energy Commission (CEC) is the appointing authority for the July 1, 2015 vacancy on the DCISC.
6. Dr. Peter S. Lam, the incumbent member of the DCISC whose term expires on June 30, 2015, responded to the CPUC's October 8, 2014 announcement and consents to being a candidate for reappointment to the DCISC.
7. Dr. Michael D. Quinn, a professional nuclear energy consultant, responded to the CPUC's October 8, 2014 announcement, and submitted an application to be considered as a candidate for appointment to the DCISC.
8. The CPUC invited comments on Dr. Lam's and Dr. Quinn's qualifications in an announcement posted on the CPUC's website on December 9, 2014.
9. Comments in support of Dr. Quinn's appointment to the DCISC were received in response to the CPUC's December 9, 2014 announcement inviting comments.
10. The Alliance for Nuclear Responsibility sent a letter to the Energy Division in support of Dr. Lam's reappointment to the DCISC.

11. The CPUC's President, Michael Picker, has reviewed the qualifications, experience, and background of Dr. Lam and Dr. Quinn.
12. Dr. Lam and Dr. Quinn have knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues, and are qualified candidates for appointment to the DCISC.
13. President Picker has chosen to provide the names of Dr. Lam as a candidate for reappointment, and Dr. Quinn as candidates for appointment to the DCISC for a three-year term beginning July 1, 2015.
14. President Picker's selection of Dr. Lam and Dr. Quinn as candidates for appointment to the DCISC for a three-year term beginning July 1, 2015 should be ratified and provided to the Chair of the CEC.

THEREFORE IT IS ORDERED THAT:

President Picker's selection of Dr. Peter S. Lam and Dr. Michael D. Quinn as qualified candidates for consideration by the Chair of the California Energy Commission for appointment to the Diablo Canyon Independent Safety Committee for a three-year term beginning July 1, 2015 is hereby ratified.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on February 26, 2015; the following Commissioners voting favorably thereon:

TIMOTHY J. SULLIVAN
Executive Director

APPENDIX A

Qualifications of Dr. Peter S. Lam

Dr. Lam is a consultant to governmental organizations and the nuclear industry on nuclear safety matters and is an incumbent member of the Diablo Canyon Independent Safety Committee. He was first appointed to the Committee by the honorable Karen Douglas, J.D., Chair of the California Energy Commission in June 2009 for the term that ran through June 30, 2012. In July 2012 Dr. Lam was reappointed to the Committee by the honorable Dr. Robert Weisenmiller, Chair of the CEC, for the term that runs through June 30, 2015.

Dr. Lam served as an Administrative Judge of the United States Nuclear Regulatory Commission (NRC) from 1990 until his retirement in 2007. In this capacity Dr. Lam adjudicated safety issues in public proceedings mandated by the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. These proceedings related to granting, suspending, revoking or amending licenses issued by the NRC, especially those involving nuclear power plants. His jurisdiction covered all of the existing 104 nuclear power plants, approximately 21,000 medical and material licensees, and nuclear waste storage in the United States. From 2002 to 2003, Dr. Lam sat on the Atomic Safety and Licensing Boards to conduct the public proceeding on the application of Pacific Gas and Electric Company to construct and operate an independent spent fuel storage installation at the Diablo Canyon Power Plant.

Prior to his judicial appointment at the NRC Dr. Lam worked in managerial and technical capacities in the nuclear energy business for 20 years. This included working as a nuclear engineer at General Electric on the design and analysis of boiling water reactors advanced fuels, and serving as a program manager at Argonne National Laboratory managing the research and development of advance fast reactor metal fuels. Dr. Lam also was a manager at Science Applications, Inc., and a consultant at NUS Corporation, consulting firms in the nuclear industry where he was involved in managing probabilistic risk assessments of operating nuclear reactors.

Dr. Lam has published 71 technical papers and reports in national and international journals and in company publications which focus on issues in nuclear transport theory, nuclear reactor fuel design, nuclear reactor operating experience, and nuclear reactor safety. Dr. Lam has also issued more than 110 judicial decisions resolving technical and legal issues on nuclear power plant operation and safety, nuclear waste disposal, and other civilian use of nuclear technology. Dr. Lam has presented lectures at international conferences held by the International Atomic Energy Agency, and chaired an IAEA working group to develop a technical treatise for the analysis and evaluation of operating experience of the world's nuclear power plants.

Dr. Lam earned a Ph.D. in nuclear engineering from Stanford University in 1971, an M.S. in nuclear engineering from Stanford University in 1968, and a B.S. in mechanical engineering from Oregon State University in 1967.

Qualifications of Dr. Michael D. Quinn

Dr. Michael Quinn is the Principal of WorkPlace Cornerstone, and has facilitated regulatory compliance, reliability assessments, and performance improvement in the commercial nuclear power industry since 1999, following a 25 year career in the US nuclear power industry at two sites. His engagements entail the nuclear new build efforts, reactor rebuilds, operating nuclear power stations, nuclear waste storage facilities, and nuclear decommissioning units in both the U.S. and Canada.

His focal points are conducting nuclear performance and reliability assessments; leading high consequence event root cause teams; facilitating performance improvement with nuclear suppliers, operating nuclear facilities, and decommissioning units; nuclear topical training; and engaging with interest groups, the public, and regulators on issues following nuclear station challenges and events. Selected engagement profiles are provided below.

In 2014, Dr. Quinn led three significant root cause assessments on a nuclear supplier to the four nuclear new-builds at Plant Vogtle and the VC Summer site. At a nuclear decommissioning site, Dr. Quinn led a root cause team in assessing

a series of spent fuel transfer handling events, and provided a *Collective Significance* assessment on the fuel transfer operations process. Both sets of events drew high regulatory interest.

In 2013, Dr. Quinn led five root cause efforts on nuclear refueling operations outage work that had been conducted at five nuclear units (ANO-1, Point Beach, Oyster Creek, Millstone Station, and Ginna) by Westinghouse-PAR. In addition, Dr. Quinn led a *Collective Significance* performance and reliability assessment on the Westinghouse-PAR organization's processes and performance.

In early 2012, Dr. Quinn was asked to be the external consultant on the Wolf Creek Nuclear Operating Company/ Excel Services - Loss of Offsite Power (LOOP) Root Cause/and comprehensive Event Assessment investigating a 98 hour loss of offsite power event at a 1200 MWe nuclear power station. Dr. Quinn was the Team Lead for the Comprehensive Event Evaluation phase which assessed Problem Identification and Resolution, Extent of Cause, 95-002 Station Recovery, and other LOOP event-related condition assessments.

Later in 2012, Dr. Quinn was the Root Cause Team Lead on the Shaw Group (now Chicago Bridge & Iron) Lake Charles LA facility's Corrective Action Program performance following a US NRC inspection (new build support for the four (4) AP1000 new build units in GA and SC).

In 2011, following a series of significant incidents, Dr. Quinn was the Root Cause Team Lead to conduct a *Collective Significance Evaluation* on a CANDU nuclear service provider. This entailed the corrective action program, root cause capabilities, human performance, and Safety Culture/ Safety Conscious Work Environment. This evaluation covered 10 nuclear units with 900 assigned staff in Ontario, Canada operated by Black and McDonald (Pickering Nuclear Power Station and Darlington Nuclear Power Station).

Later in 2011, Dr. Quinn was the Root Cause Team Lead for a Mitsubishi Heavy Industries/ MNES/ Dominion root cause effort on a design phase issue for the U.S. APWR project on Dominion's North Anna-3.

In January 2010, Dr. Quinn was appointed by the Executive VP of Bruce Nuclear Station to be the Root Cause Team Lead, and then Project Manager, to recover a significant trans-uranic uptake to over 500 workers during two nuclear reactor rebuilds. Dr. Quinn led a team of 25 technical staff to recover, over a 12 month period, the effectiveness and reliability of the radiological protection group and its safety culture, corrective action, and human performance programs on the Restart Campaign for Bruce Units 1&2. He facilitated numerous meetings with large groups of trades and the public during recovery, and made presentations to the Canadian Nuclear Safety Commission.

In 2009, while assigned to Atomic Energy Canada Limited, Dr. Quinn led several root cause efforts on significant events that occurred during two reactor plant rebuild efforts. In addition he led an RCA Evaluation effort on a significant incident that occurred during a mining evolution ½ mile below the surface at the Waste Isolation Pilot Project run by the US Department of Energy in Carlsbad, NM.

In 2008, Dr. Quinn, as part of an assessment team commissioned by the State of Vermont, evaluated the root cause process within the corrective action program evaluation for the Reliability Assessment of the Vermont Yankee Nuclear Power Station, preceding the 2012 relicensing process.

Since 2006, Dr. Quinn has been contracted by the US Nuclear Regulatory Commission to provide Root Cause Evaluation training using the Corcoran Phoenix Method. The US NRC engages this training to evaluate the adequacy of nuclear station event reports. To date, Dr. Quinn and his team have provided this training to over 500 US NRC inspectors.

Other recent training conducted by Dr. Quinn includes: *International Atomic Energy Agency/ Brookhaven National Lab* - Nuclear Public Communications – 2014; *CANDU Owner's Group* - Human Performance Seminar to 18 nuclear station managers from 24 CANDU units on four continents, and *Root Cause Training* to various organizations in the nuclear power industry in 2014.

Prior to his current role, Quinn held a number of increasingly responsible positions at two nuclear power stations. From 1975 to 1993 he was assigned to

the Connecticut Yankee Haddam Neck Nuclear Station, and held positions/roles as Radio-Chemist, Manager of Chemistry and Radiochemistry, Manager of Offsite Radiation Dose Consequence, Refueling and Maintenance Outage Manager, Duty Officer and Director of Station Emergency Operations. He was also a member and eventually a Chair of the Station Operations Review Committee and the Corrective Action Review Board. His last position at CY was Director of Station Services. He earned a US NRC Senior Reactor Operator's License while at Haddam Neck Station.

In 1994 and 1995, Dr. Quinn was Manager of Nuclear Planning and Operational Standards for Northeast Nuclear Energy Company for five nuclear units at three sites.

From 1996 to 1999, he was a Project Manager assigned to the Millstone Nuclear Power Station Recovery Team, where he led groups in developing, implementing, and evaluating programs to establish a nuclear safety culture. Dr. Quinn facilitated and presented at public meetings, and made several presentations to the US NRC during the three year recovery.

Dr. Quinn earned a Doctorate in Organizational Management Systems and a Master of Business Administration degree, both from the University of New Haven. He earned a Bachelor of Science degree in Chemistry from Charter Oak College. He previously held a US NRC Senior Reactor Operator License (10071) on a Westinghouse pressurized water reactor. He is a Director on the Board of Connecticut Community Care, Inc.

Dr. Quinn was one of the four qualified candidates selected by the California Public Utilities Commission for consideration by the California Governor for appointment to the Diablo Canyon Independent Safety Committee for the term beginning July 1, 2014 (see CPUC Resolution E-4657 dated June 12, 2014).

[END OF APPENDIX A]